Commonwealth of Kentucky

Natural Resources and Environmental Protection Cabinet Department for Environmental Protection Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

Title V AIR QUALITY PERMIT Issued under 401 KAR 52:020

Permittee Name: Buffalo Trace Distillery, Incorporated Mailing Address: P.O. Box 619, Frankfort, Kentucky 40601

Source Name: Buffalo Trace Distillery, Incorporated Mailing Address: P.O. Box 619, Frankfort, Kentucky 40601

Source Location: 1001 Wilkinson Boulevard, Frankfort, Kentucky 40601

Permit Number: V-03-032 Log Number: 55698

Review Type: Operating, Title V/Synthetic Minor

Source ID#: 21-073-00009

Regional Office: Frankfort Regional Office

643 Teton Trail

Frankfort, KY 40601-1758

(502) 564-3358

County: Franklin

Application

Complete Date: May 21, 2003

Issuance Date: December 16, 2003 Expiration Date: December 16, 2008

> John S. Lyons, Director Division for Air Quality

TABLE OF CONTENTS

SECTION		DATE OF ISSUANCE	PAGE
A.	PERMIT AUTHORIZATION	December 16, 2003	1
B.	EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS	December 16, 2003	2
C.	INSIGNIFICANT ACTIVITIES	December 16, 2003	31
D.	SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS	December 16, 2003	32
E.	SOURCE CONTROL EQUIPMENT OPERATING REQUIREMENTS	December 16, 2003	33
F.	MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS	December 16, 2003	34
G.	GENERAL PROVISIONS	December 16, 2003	37
H.	ALTERNATE OPERATING SCENARIOS	December 16, 2003	42
I.	COMPLIANCE SCHEDULE	December 16, 2003	42

Permit Number: $\underline{V-03-032}$ Page: $\underline{1}$ of $\underline{42}$

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

Permit Number: <u>V-03-032</u> **Page:** <u>2</u> **of** <u>42</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 01 (01-001, 01-002, 01-005 & 03-005) Grain And Distiller's Dried Handling

Description:

Equipment includes: Grain unloading/receiving hopper with enclosure, conveyors, bucket elevators, distiller's dried grain conveying, storage, and loadout (01-001 and 01-002) Maximum operating rate for grain loading/conveyor: 56 tons/hr.

Construction commenced: 1974.

(01-005) Maximum operating rate for hammermill conveyor: 25.2 tons/hr.

Construction commenced: 1974.

(03-005) Maximum operating rate for distiller's dried grain loading: 33 tons/hr.

Construction commenced: Before 1969.

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive Emissions.

Applicable Requirements:

- a. Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not limited to the installation and utilization of hoods, fans, and fabric filters to enclose and vent the emissions generated from the processing of dust generating materials, or use of water sprays or other measures to suppress the dust emissions during handling.
- b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive emission beyond the property line is prohibited.

1. Operating Limitations:

None

2. <u>Emission Limitations:</u>

None

3. Testing Requirements:

Permit Number: $\underline{V-03-032}$ Page: $\underline{3}$ of $\underline{42}$

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. **Specific Monitoring Requirements:**

- a. The permittee shall monitor the amount of grain received and processed on a monthly basis.
- b. The permittee shall monitor the amount of distiller's dried grain processed on a monthly basis.

5. Specific Record Keeping Requirements:

- a. Records of grain received and processed shall be maintained on a monthly basis.
- b. Records of distiller's dried grain processed shall be maintained on a monthly basis.

6. **Specific Reporting Requirements:**

See Section F.

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

Permit Number: $\underline{V-03-032}$ Page: $\underline{4}$ of $\underline{42}$

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 02 (01-006) Hammer Mill and Receiver Process Cyclone

Description:

Equipment: Hammer mill and receiver process cyclone. Maximum operating rate: 25.2 tons/hr milled grain.

Construction commenced: Before 1969.

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing process operations commenced before July 2, 1975.

1. **Operating Limitations:**

None

2. <u>Emission Limitations:</u>

a. Pursuant to 401 KAR 61:020, Section 3 (2)(a), particulate emissions into the open air shall not exceed [4.10(P)^{0.67}] lbs/hour for based on a three-hour-average where P is the processing rate in tons/hour. Compliance with the allowable particulate standard may be demonstrated by calculating particulate emissions using grain processing rate and emission factor information as follows:

PM Emissions (lbs/hour) from grain handling = (0.12 lbs/ton which is the AP-42 emission factor)(grain processing averaged weekly in tons/hour).

b. Pursuant to 401 KAR 61:020, Section 3(1)(a), visible emissions shall not equal or exceed 40% opacity based on a six-minute-average.

3. Testing Requirements:

None

4. **Specific Monitoring Requirements:**

- a. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If any visible emissions are seen, then opacity must be determined by U.S. EPA Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.
- b. The permittee shall monitor the grain processing rate and hours of operation on a weekly basis.

5. Specific Record Keeping Requirements:

Records of grain processed and hours of operation shall be maintained on a weekly basis.

Permit Number: <u>V-03-032</u> **Page:** <u>5</u> **of** <u>42</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

Permit Number: V-03-032 Page: $\underline{6}$ of $\underline{42}$

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 03 (02-001 and 02-005) Fermentation Process

Description:

Equipment includes: Fermentation and distilling process.

Construction commenced: Before 1969.

APPLICABLE REGULATIONS:

None

1. **Operating Limitations:**

None

2. <u>Emission Limitations:</u>

None

3. Testing Requirements:

None

4. **Specific Monitoring Requirements:**

The permittee shall monitor the grain input in bushels on a monthly basis.

5. Specific Record Keeping Requirements:

Records of grain input in bushels shall be maintained on a monthly basis.

6. **Specific Reporting Requirements:**

See Section F.

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

Permit Number: <u>V-03-032</u> **Page:** <u>7</u> **of** <u>42</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 04 (03-001) Rotary Dryer

Description:

Equipment: Rotary steam tube dryer.

Control equipment: Cyclone.

Maximum operating rate: 23.6 tons/hr distiller's dried grain.

Construction commenced: 1976.

APPLICABLE REGULATIONS:

401 KAR 59:010, New Process operations commenced on or after July 2, 1975.

1. **Operating Limitations:**

None

2. <u>Emission Limitations:</u>

a. Pursuant to 401 KAR 59:010, Section 3(2), particulate emissions into the open air shall not exceed [3.59(P)^{0.62}] lbs/hour based on a three-hour-average where P is the processing rate in tons/hour. Compliance with the allowable particulate standard may be demonstrated by calculating particulate emissions using grain processing rate, emission factor information, and cyclone control efficiency as follows:

PM Emissions (lbs/hour) from grain drying = (1.05 lb/ton*)(grain processing averaged weekly in tons/hour)

- * AP-42 emission factor with the cyclone control efficiency factored in
- b. Pursuant to 401 KAR 59:010, Section 3(1)(a), any continuous emissions into the open air shall not equal or exceed 20% opacity based on a six-minute-average.

3. Testing Requirements:

None

4. **Specific Monitoring Requirements:**

- a. The permittee shall monitor the grain processing rate and hours of operation on a weekly basis.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions are seen, then the permittee shall determine the opacity of emissions by U.S. EPA Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs

5. Specific Record Keeping Requirements:

Records of weekly grain processed and weekly hours of operation shall be maintained.

Permit Number: $\underline{V-03-032}$ Page: $\underline{8}$ of $\underline{42}$

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

Permit Number: <u>V-03-032</u> **Page:** <u>9</u> **of** <u>42</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 05 (03-002 and 03-003) Four Rotary Dryers

Description:

Equipment: Four rotary steam tube dryers.

Maximum operating rate for dryers (total): 16.8 tons/hr distiller's dried grain.

Construction commenced on or before 1969.

Control equipment: Cyclone.

APPLICABLE REGULATIONS:

401 KAR 61:020, process operations commenced before July 2, 1975.

1. **Operating Limitations:**

None

2. <u>Emission Limitations:</u>

a. Pursuant to 401 KAR 61:020, Section 3(2)(a), particulate emissions into the open air shall not exceed [4.10(P)^{0.67}] lbs/hour based on a three-hour-average where P is the processing rate in tons/hour. Compliance with the allowable particulate standard may be demonstrated by calculating particulate emissions using grain processing rate, emission factor information, and cyclone control efficiency as follows:

PM Emissions (lbs/hour) from grain drying = (1.05 lb/ton*)(grain processing averaged weekly in tons/hour)

*AP-42 emission factor with the cyclone control efficiency factored in

PM Emissions (lbs/hour) from grain conveying = (0.061lbs/ton which is the AP-42 emission factor)(grain processing averaged weekly in tons/hour)

b. Pursuant to 401 KAR 61:020, Section 3(1)(a), visible emissions shall not equal or exceed 40% opacity based on a six-minute-average.

3. <u>Testing Requirements:</u>

None

4. **Specific Monitoring Requirements:**

- a. The permittee shall monitor the grain processing rate and hours of operation on a weekly basis.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions are seen, then the permittee shall determine the opacity of emissions by U.S. EPA Reference Method 9 and initiate an inspection of the control equipment for any necessary repairs.

Permit Number: <u>V-03-032</u> **Page:** <u>10</u> **of** <u>42</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Record Keeping Requirements:

Records of weekly grain processed and hours of operation shall be maintained.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

Permit Number: <u>V-03-032</u> **Page:** <u>11</u> **of** <u>42</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 06 (05-001) Barrel Filling, Aging, and Dumping

Description:

Equipment includes: Barrel filling stations, product aging in warehouses, and barrel dumping Construction commenced: Before 1969.

APPLICABLE REGULATIONS:

None

1. **Operating Limitations:**

None

2. <u>Emission Limitations:</u>

None

3. <u>Testing Requirements:</u>

None

4. **Specific Monitoring Requirements:**

The permittee shall monitor the number of barrels stored on a yearly basis.

5. Specific Record Keeping Requirements:

Maintain a record of the number of barrels stored on a yearly basis.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

Permit Number: <u>V-03-032</u> **Page:** <u>12</u> **of** <u>42</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 07 (06-001 through 06-003, 07-001 and 07-003, and 08-001) Processing And Bottling Operations

Description:

Equipment includes: Holding, processing, & bottling tanks (06-001 through 06-003); bottle filling and pipeline component (07-001 and 07-003) & peripheral equipment (08-001). Construction commenced: Before 1969.

APPLICABLE REGULATIONS:

None

1. **Operating Limitations:**

None

2. <u>Emission Limitations:</u>

None

3. <u>Testing Requirements:</u>

None

4. Specific Monitoring Requirements:

The permittee shall monitor the proof gallons processed on a yearly basis.

5. Specific Record Keeping Requirements:

Records of the proof gallons processed shall be maintained on a yearly basis.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

Permit Number: <u>V-03-032</u> **Page:** <u>13</u> **of** <u>42</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 08 (09-001) Indirect Heat Exchanger

Description:

Horizontally opposed natural gas fired indirect heat exchanger.

Secondary fuel: Fuel oil #2 and #4.

Tertiary fuel: Waste Oil.

Maximum continuous rating: 176 mmBTU/hr.

Construction commenced: May 1972

APPLICABLE REGULATIONS:

401 KAR 59:015, New indirect heat exchangers applicable to an emission unit with a capacity less than 250 mmBTU /hr and commenced on or after April 9, 1972.

1. **Operating Limitations:**

Heat input shall not exceed 176 mmBTU /hr. Maximum total annual (consecutive twelve (12) months) secondary fuel consumption shall not exceed 6,714,000 gallons/year to preclude the applicability of 401 KAR 51:017.

2. Emission Limitations:

a. Pursuant to 401 KAR 59:015, Section 4(1)(c), Particulate emissions from each unit shall not exceed 0.1 lb/mmBTU upon a three-hour average for any fuel used.

The permittee may assure compliance with the particulate standard by calculating particulate emissions using the following formula:

When combusting natural gas:

Particulate emission = [(The most recent finalized AP-42 particulate matter emission factor) divided by (the heating value of the natural gas used in mmBTU/ 10^6 scf)].

When combusting #2 fuel oil:

Particulate emission = [(The most recent finalized AP-42 particulate matter emission factor) divided by (Heating value of the fuel oil in mmBTU/ 10^3 gal)].

When combusting #4 fuel oil:

Particulate emission = [(The most recent finalized AP-42 particulate matter emission factor) divided by (Heating value of the fuel oil in mmBTU $/10^3$ gal)].

When combusting waste oil:

Particulate emission = [(The most recent finalized AP-42 particulate matter emission factor) divided by (Heating value of the waste oil mmBTU $/10^3$ gal)].

Permit Number: <u>V-03-032</u> **Page:** <u>14</u> **of** <u>42</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. Pursuant to 401 KAR 59:015, Section 4(2), emissions from each unit shall not exceed 20% opacity based on a six minute average, except that a maximum of 40% opacity, based on a six minute average, shall be permissible for not more than six consecutive minutes in any consecutive 60 minutes during cleaning the firebox or blowing soot.
- c. Pursuant to 401 KAR 59:015, Section 5(1)(b), sulfur dioxide emissions from the unit shall not exceed 0.8 lb/mmBTU based on a twenty four-hour average.

The permittee may assure compliance with the sulfur dioxide standard by calculating sulfur dioxide emissions using the following formula:

When combusting natural gas:

Sulfur dioxide emissions = [(The most recent finalized AP-42 sulfur dioxide emission factor) divided by (Heating value of the natural gas used in mmBTU/ 10^6 scf)].

When combusting #2 fuel oil:

Sulfur dioxide emissions = [(The most recent finalized AP-42 sulfur dioxide emission factor) divided by (Heating value of the fuel oil in $mmBTU/10^3$ gal)].

When combusting #4 fuel oil:

Sulfur dioxide emissions = [(The most recent finalized AP-42 sulfur dioxide emission factor) divided by (Heating value of the fuel oil in mmBTU/ 10^3 gal)].

When combusting waste oil:

Sulfur dioxide emissions = [(The most recent finalized AP-42 sulfur dioxide emission factor) divided by (Heating value of the waste oil in mmBTU/ 10^3 gal)].

3. Testing Requirements:

- a. If fuel oil or waste oil is combusted, the permittee shall determine the opacity of emissions from the stack using U.S. EPA Reference Method 9 annually, or more frequently if requested by the Division.
- b. The permittee shall conduct a performance test for particulate emissions when combusting fuel oil or waste oil if such usage exceeds 60 days within any consecutive twelve months period.

4. **Specific Monitoring Requirements:**

a. The permittee shall monitor fuel usage on a monthly basis.

Permit Number: <u>V-03-032</u> Page: <u>15</u> of <u>42</u>

REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. The permittee shall monitor the heating value and sulfur content of each type of fuel oil and waste oil combusted. The permittee may use the certification from the fuel supplier to satisfy this requirement. The fuel supplier certification shall include the name of the oil supplier and a statement from the oil supplier that the oil complies with the specifications under the definition of fuel oil specified in the regulation.

5. **Specific Record Keeping Requirements:**

- a. The permittee shall maintain records of the amount of each type of fuel combusted in each unit on a monthly basis.
- b. The permittee shall maintain records of the heating value and sulfur content for each type of fuel oil.
- c. For the purposes of precluding applicability of Prevention of Significant Deterioration of Air Quality (PSD) and to satisfy Section D.3.a, a twelve-month rolling sum of particulate emissions (TMPE) shall be kept for these units for use in tracking particulate emissions due to combustion, e.g.,

$$TMPE = S \quad PM_{mNG} + S \quad PM_{m2F} + S \quad PM_{m2F} + S \quad PM_{mH} + S \quad PM_{mWO} \\ m=1 \quad \ \ \, PM_{mWO} \\ m=1 \quad \ \, PM_{mWO} \\ m=$$

Where TMPE= Summation of particulate emissions for the current month and previous 11 months for this emission point in Tons

m = the month, e.g.,

m=1=current month,

m=2=previous month,

m=3=month before previous month, etc.

PM_{mNG}= particulate matter emitted for the month due to natural gas use

PM_{m2F}= particulate matter emitted for the month due to #2 fuel oil use

PM_{m4F}= particulate matter emitted for the month due to #4 fuel oil use

PM_{mWO}= particulate matter emitted for the month due to waste oil use

d. For the purposes of precluding applicability of PSD and to satisfy Section D.3.b, a twelvemonth rolling sum of sulfur dioxide emissions (TMSE) shall be kept for these units for use in tracking sulfur dioxide emissions due to combustion, i.e.

$$TMSE = S \quad SO_{\substack{mNG \\ m=1}}^{12} + S \quad SO_{\substack{m2F \\ m=1}}^{12} + S \quad SO_{\substack{m4F \\ m=1}}^{12} + S \quad SO_{\substack{mWO \\ m=1}}^{12}$$

Where $TMSE_{unit14}$ = Summation of sulfur dioxide emissions for the current month and previous 11 months for this emission point in Tons.

Permit Number: <u>V-03-032</u> **Page:** <u>16</u> **of** <u>42</u>

m = the month, i.e.
m=1=current month,
m=2=previous month,
m=3=month before previous month, etc.

 SO_{2mNG} = sulfur dioxide emitted for the month due to natural gas use SO_{2m2F} = sulfur dioxide emitted for the month due to #2 fuel oil use SO_{2m4F} = sulfur dioxide emitted for the month due to #4 fuel oil use SO_{2mWO} = sulfur dioxide emitted for the month due to waste oil use

e. For the purposes of precluding applicability of PSD and to satisfy Section D.3.c, a twelvemonth rolling sum of nitrogen oxide emissions (TMNE) shall be kept for these units for use in tracking NOx due to combustion, i.e.

$$TMNE = S \quad NOx_{mNG} + S \quad NOx_{m=1} \\ NOx_{m=1} + S \quad NOx_{m=1} \\ NOx_{m=1} + S \quad NOx_{m=1} \\ NOx_{$$

Where TMNE = Summation of NOx emissions for the current month and previous 11 months for this emission point in Tons

m =the month, i.e.

m=1=current month,

m=2=previous month,

m=3=month before previous month, etc.

NOx_{mNG}= NOx emitted for the month due to natural gas us

 NOx_{m2F} = NOx emitted for the month due to #2 fuel oil use

NOx_{m4F}= NOx emitted for the month due to #4 fuel oil use

NOx_{mWO}= NOx emitted for the month due to waste oil use

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

Permit Number: <u>V-03-032</u> **Page:** <u>17</u> **of** <u>42</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 09 (09-002) Indirect Heat Exchanger

Description:

Spreader stoker coal-fired indirect heat exchanger.

Control equipment: Multicyclones.

Maximum continuous rating: 126 mmBTU /hr.

Construction commenced: Before 1969

APPLICABLE REGULATIONS:

401 KAR 61:015, Existing indirect heat exchangers applicable to an emission unit with a capacity less than 250 mmBTU /hr and commenced before April 9, 1972.

1. **Operating Limitations:**

Heat input shall not exceed 126 mmBTU /hr.

2. Emission Limitations:

a. Pursuant to 401 KAR 61:015, Section 4(1), particulate emissions shall not exceed 0.45 lb/ mmBTU based on a three-hour average.

The permittee may assure compliance with the particulate standard by calculating particulate emissions using the following formula:

Particulate emission = [(6.03 lb/ton which is the emission factor from most recent stack test with the cyclone control efficiency factored in) divided by (coal heating value in mmBTU /ton)].

- b. Pursuant to 401 KAR 61:015, Section 4(3), emissions shall not exceed 40 percent opacity except that a maximum of sixty (60) percent opacity shall be permissible for not more than six (6) consecutive minutes in any sixty (60) consecutive minutes during cleaning the fire box or blowing soot.
- c. Pursuant to 401 KAR 61:015, sulfur dioxide emissions shall not exceed 1.42 lb/ mmBTU based on a twenty-four average.

The permittee may assure compliance with the sulfur dioxide standard by calculating sulfur dioxide emissions using the following formula.

Sulfur dioxide = [(38 x percent sulfur in coal lb/ton which is the AP-42 emission factor) divided by (coal heating value in mmBTU /ton)].

3. Testing Requirements:

a. The permittee shall perform one performance test for particulate emissions within the term of this permit.

Permit Number: <u>V-03-032</u> **Page:** <u>18</u> **of** <u>42</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Testing Requirements (continued):

b. When the unit is in operation, the permittee shall read, weather permitting, the opacity of emissions using U.S. EPA Reference Method 9 once per month during the daylight shift.

4. **Specific Monitoring Requirements:**

- a. The permittee shall monitor the fuel use, heating value, and ash and sulfur content of coal by performing analysis on each shipment of coal received.
- b. In accordance with 401 KAR 61:015, Section 6 (3), the permittee shall monitor the amount of fuel combusted on a daily basis.

5. **Specific Record Keeping Requirements:**

- a. The permittee shall maintain the records of the fuel analysis.
- b. The permittee shall maintain the records of the amount of fuel combusted on a daily basis.
- c. For the purposes of precluding applicability of Prevention of Significant Deterioration of Air Quality (PSD) and to satisfy Section D.3.a, a twelve-month rolling sum of particulate emissions (TMPE) shall be kept for this unit for use in tracking particulate emissions due to combustion, i.e.

$$TMPE_{unit9} = \sum_{m=1}^{12} PM_{mCoal}$$

Where TMPE_{unit9} = Summation of particulate emissions for the current month and previous 11 months for this emission point in Tons

m =the month, i.e.

m=1=current month,

m=2=previous month,

m=3=month before previous month, etc.

PM_{mCoal}= particulate matter emitted for the month due to coal use

The emission factor for the particulate emission shall be as specified in 2.a), above, until the emission factor is determined from the testing required by 3.a), above.

d. For the purposes of precluding applicability of Prevention of Significant Deterioration of Air Quality (PSD) and to satisfy Section D.3.b, a twelve-month rolling sum of sulfur dioxide emissions (TMSE) shall be kept for this unit for use in tracking total SO₂ emissions due to combustion, i.e.

$$TMSE_{unit9} = \sum_{m=1}^{12} SO_{2mCoal}$$

Where $TMSE_{unit9}$ = Summation of SO_2 emissions for the current month and previous 11 months for this emission point in Tons

Permit Number: <u>V-03-032</u> **Page:** <u>19</u> **of** <u>42</u>

REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Record Keeping Requirements (continued):

m = the month, i.e. m=1=current month,

m=2=previous month,

m=3=month before previous month, etc.

SO_{2mCoal}= SO₂ emitted for the month due to coal use

e. For the purposes of precluding applicability of Prevention of Significant Deterioration of Air Quality (PSD) and to satisfy Section D.3.c, a twelve-month rolling sum of nitrogen oxides (TMNE) shall be kept for this unit for use in tracking NOx emissions due to combustion, i.e.

$$TMNE_{unit9} = \sum_{m=1}^{12} \ NOx_{mCoal}$$

Where TMNE_{unit9} = Summation of NOx emissions for the current month and previous 11 months for this emission point in Tons

m =the month, i.e.

m=1=current month,

m=2=previous month,

m=3=month before previous month, etc.

NOx_{mCoal}= NOx emitted for the month due to coal use

6. **Specific Reporting Requirements:**

See Section F.

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

Permit Number: <u>V-03-032</u> **Page:** <u>20</u> **of** <u>42</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 10 (09-003) Indirect Heat Exchanger

Description:

Horizontally opposed natural gas fired indirect heat exchanger.

Secondary fuel: Fuel oil #2 and #4.

Tertiary fuel: Waste Oil.

Maximum continuous rating: 63 mmBTU /hr.

Construction commenced: May 1972.

APPLICABLE REGULATIONS:

401 KAR 59:015, New indirect heat exchangers, applicable to an emissions unit with a capacity less than 250 mmBTU /hour which commenced on or after April 9, 1972.

1. **Operating Limitations:**

Heat input shall not exceed 63 mmBTU /hr. Maximum total annual (consecutive twelve (12) month) secondary fuel consumption shall not exceed 2,102,000 gals/year to preclude the applicability of 401 KAR 51:017.

2. Emission Limitations:

a. Pursuant to 401 KAR 59:015, Section 4(1)(c), Particulate emissions shall not exceed 0.1 lb/mmBTU on a three-hour average.

The permittee may assure compliance with the particulate standard by calculating particulate emissions using the following formulae.

When combusting natural gas:

Particulate emission = [(The most recent finalized AP-42 particulate matter emission factor) divided by (the heating value of the natural gas used in mmBTU/ 10^6 scf)].

When combusting #2 fuel oil:

Particulate emission = [(The most recent finalized AP-42 particulate matter emission factor) divided by (Heating value of the fuel oil in mmBTU $/10^3$ gal)].

When combusting #4 fuel oil:

Particulate emission = [(The most recent finalized AP-42 particulate matter emission factor) divided by (Heating value of the fuel oil in mmBTU /10³ gal)].

When combusting waste oil:

Particulate emission = [(The most recent finalized AP-42 particulate matter emission factor) divided by (Heating value of the waste oil in mmBTU/10³ gal)].

Permit Number: <u>V-03-032</u> **Page:** <u>21</u> **of** <u>42</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. <u>Emission Limitations (continued):</u>

- b. Pursuant to 401 KAR 59:015, Section 4(2), emissions from the unit shall not exceed 20% opacity based on a six minute average, except that a maximum of 40% opacity, based on a six minute average, shall be permissible for not more than six consecutive minutes in any consecutive 60 minutes during cleaning the firebox or blowing soot.
- c. If fuel oil or waste oil is combusted, the permittee shall determine the opacity of emissions from the stack using U.S. EPA Reference Method 9 annually, or more frequently if requested by the Division. This unit is considered to be in compliance with the PM, SO₂, and opacity standards while burning natural gas.
- d. Pursuant to 401 KAR 59:015, Section 5(1)(b), sulfur dioxide emissions shall not exceed 0.8 lb/mmBTU based on a twenty four-hour average.

The permittee may assure compliance with the sulfur dioxide standard by calculating sulfur dioxide emissions using the following formulae.

When combusting natural gas:

Sulfur dioxide emissions = [(The most recent finalized AP-42 sulfur dioxide emission factor) divided by (Heating value of the natural gas used in mmBTU/ 10^6 scf)].

When combusting #2 fuel oil:

Sulfur dioxide emissions = [(The most recent finalized AP-42 sulfur dioxide emission factor) divided by (Heating value of the fuel oil in mmBTU $/10^3$ gal)].

When combusting #4 fuel oil:

Sulfur dioxide emissions = [(The most recent finalized AP-42 sulfur dioxide emission factor) divided by (Heating value of the fuel oil in mmBTU $/10^3$ gal)].

When combusting waste oil:

Sulfur dioxide emissions = [(The most recent finalized AP-42 sulfur dioxide emission factor) divided by (Heating value of the waste oil in mmBTU $/10^3$ gal)].

3. Testing Requirements:

a. If fuel or waste oil is combusted, the permittee shall determine the opacity of emissions from the stack using U.S. EPA Reference Method 9 annually, or more frequently if requested by the Division.

Permit Number: <u>V-03-032</u> **Page:** <u>22</u> **of** <u>42</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. The permittee shall conduct a performance test for particulate emissions when combusting fuel or waste oil if such usage exceeds 60 days within any consecutive twelve months period.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor fuel usage on a monthly basis.
- b. The permittee shall monitor the heating value and sulfur content of each type of fuel and waste oil combusted. The permittee may use the certification from the fuel supplier to satisfy this requirement. The fuel supplier certification shall include the name of the oil supplier and a statement from the oil supplier that the oil complies with the specifications under the definition of fuel oil specified in the regulation.

5. Specific Record Keeping Requirements:

- a. The permittee shall maintain records of the amount of each type of fuel combusted in on a monthly basis.
- b. The permittee shall maintain records of the heating value and sulfur content for each type of fuel and waste oil.
- c. For the purposes of precluding applicability of PSD and to satisfy Section D.3.a, a twelvemonth rolling sum of particulate emissions (TMPE) shall be kept for use in tracking particulate emissions due to combustion, e.g.,

$$TMPE = S \quad PM_{mNG}^{12} + S \quad PM_{m2F}^{12} + S \quad PM_{m4F}^{12} + S \quad PM_{mWO}^{12}$$

Where TMPE = Summation of particulate emissions for the current month and previous 11 months for this emission point in tons

m =the month, e.g.,

m=1=current month,

m=2=previous month,

m=3=month before previous month, etc.

PM_{mNG}= particulate matter emitted for the month due to natural gas use

PM_{m2F}= particulate matter emitted for the month due to #2 fuel oil use

PM_{m4F}= particulate matter emitted for the month due to #4 fuel oil use

PM_{mWO}= particulate matter emitted for the month due to waste oil use

d. For the purposes of precluding applicability of PSD and to satisfy Section D.3.b, a twelvemonth rolling sum of sulfur dioxide emissions (TMSE) shall be kept for use in tracking particulate emissions due to combustion, i.e. **Permit Number:** <u>V-03-032</u> **Page:** <u>23</u> **of** <u>42</u>

REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Record Keeping Requirements (continued):

$$\text{TMSE} = \overset{12}{S} \overset{12}{SO_{mNG}} + \overset{12}{S} \overset{12}{SO_{m2F}} + \overset{12}{S} \overset{12}{SO_{m4F}} + \overset{12}{S} \overset{12}{SO_{mWO}}$$

Where $TMSE_{unit14}$ = Summation of sulfur dioxide emissions for the current month and previous 11 months for this emission point in Tons.

m =the month, i.e.

m=1=current month,

m=2=previous month,

m=3=month before previous month, etc.

SO_{2mNG}= sulfur dioxide emitted for the month due to natural gas use

SO_{2m2F}= sulfur dioxide emitted for the month due to #2 fuel oil use

SO_{2m4F}= sulfur dioxide emitted for the month due to #4 fuel oil use

SO_{2mWO}= sulfur dioxide emitted for the month due to waste oil use

e. For the purposes of precluding applicability of PSD and to satisfy Section D.3.c, a twelve-month rolling sum of nitrogen oxide emissions (TMNE) shall be kept for these units for use in tracking NOx due to combustion, i.e.

$$TMNE = S \quad NOx_{mNG} + S \quad NOx_{m2F} + S \quad NOx_{m=1} \\ NOx_{m=1} \\ NOx_{m=1} \\ NOx_{mH} \\ NOx_{mH$$

Where TMNE = Summation of NOx emissions for the current month and previous 11 months for this emission point in Tons.

m = the month, i.e.

m=1=current month.

m=2=previous month,

m=3=month before previous month, etc.

NOx_{mNG}= NOx emitted for the month due to natural gas us

NOx_{m2F}= NOx emitted for the month due to #2 fuel oil use

NOx_{m4F}= NOx emitted for the month due to #4 fuel oil use

 $NOx_{mWO} = NOx$ emitted for the month due to waste oil use

6. **Specific Reporting Requirements:**

See Section F.

7. Specific Control Equipment Operating Conditions:

None

8. <u>Alternate Operating Scenarios:</u>

Permit Number: <u>V-03-032</u> **Page:** <u>24</u> **of** <u>42</u>

Emissions Unit 11 (12-001) Wastewater Treatment Process

Description:

Equipment includes: Wastewater treatment system.

Construction commenced: 1974.

APPLICABLE REGULATIONS:

None

1. **Operating Limitations:**

None

2. <u>Emission Limitations:</u>

None

3. <u>Testing Requirements:</u>

None

4. **Specific Monitoring Requirements:**

None

5. Specific Record Keeping Requirements:

None

Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

Permit Number: <u>V-03-032</u> **Page:** <u>25</u> **of** <u>42</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 12 (13-001) Cooling Tower

Description:

Maximum operating rate: 156,000 gals/yr of water.

Construction commenced: 1974.

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive Emissions.

Applicable Requirements:

- a. Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.
- b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive emissions beyond the property line is prohibited.

1. **Operating Limitations:**

None

2. <u>Emission Limitations:</u>

None

3. Testing Requirements:

None

4. **Specific Monitoring Requirements:**

None

5. Specific Record Keeping Requirements:

None

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

None

8. <u>Alternate Operating Scenarios:</u>

Permit Number: <u>V-03-032</u> **Page:** <u>26</u> **of** <u>42</u>

SECTION B - EMISSION POINTS, AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Units 14 & 15 (14-001 and 14-002) Two Indirect Heat Exchangers

Description:

Two (2) identical natural gas fired indirect heat exchangers.

Secondary fuel: Fuel oil #2 and Fuel oil #4.

Tertiary fuel: Waste Oil.

Maximum continuous rating: 58 mmBTU/hr, each.

Construction commenced: May 9, 2002.

APPLICABLE REGULATIONS:

401 KAR 59:015, New indirect heat exchangers, applies to emissions unit with a capacity less than 250 mmBTU /hour which commenced operation on or after April 9, 1972.

401 KAR 60:005, incorporated by reference 40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, applicable to a steam generating unit with a capacity of less than 100 mmBTU/hr but greater than 10 mmBTU/hr which commenced on or after June 9, 1989.

1. **Operating limitations:**

Heat input shall not exceed 58 mmBTU /hr, each. Maximum total annual (consecutive twelve (12) month) secondary fuel consumption shall not exceed 3,627,000 gals/year for each unit to preclude the applicability of 401 KAR 51:017.

2. Emission Limitations:

a. Pursuant to 401 KAR 59:015, Section 4(1)(c), Particulate emissions from each unit shall not exceed 0.1 lb/mmBTU upon a three-hour average for any fuel used.

The permittee may assure compliance with the particulate standard by calculating particulate emissions using the following formulae.

When combusting natural gas:

Particulate emission = [(The most recent finalized AP-42 particulate matter emission factor) divided by (the heating value of the natural gas used in mmBTU/ 10^6 scf)].

When combusting #2 fuel oil:

Particulate emission = [(The most recent finalized AP-42 particulate matter emission factor) divided by (Heating value of the fuel oil in mmBTU/ 10^3 gal)].

Permit Number: <u>V-03-032</u> **Page:** <u>27</u> **of** <u>42</u>

REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations (continued):

When combusting #4 fuel oil:

Particulate emission = [(The most recent finalized AP-42 particulate matter emission factor) divided by (Heating value of the fuel oil in mmBTU $/10^3$ gal)].

When combusting waste oil:

Particulate emission = [(The most recent finalized AP-42 particulate matter emission factor) divided by (Heating value of the waste oil in mmBTU $/10^3$ gal)].

- b. Pursuant to 401 KAR 59:015, Section 4(2), and 401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Dc, visible emissions from each unit shall not exceed 20% opacity based on a six minute average, except for one six minute period per hour of not more than 27% opacity.
- c. Pursuant to 401 KAR 60:005, incorporating by reference 40 CFR 60, Subpart Dc, sulfur dioxide emissions shall not exceed 0.8 lb/ mmBTU on twenty four average for each unit. Compliance with the allowable sulfur dioxide emission limitation while burning #2 fuel oil may be demonstrated based on fuel supplier certification.

The permittee may assure compliance with the sulfur dioxide standard by calculating sulfur dioxide emissions using the following formulae.

When combusting natural gas:

Sulfur dioxide emissions = [(The most recent finalized AP-42 sulfur dioxide emission factor) divided by (Heating value of the natural gas used in mmBTU/ 10^6 scf)].

When combusting #2 fuel oil:

Sulfur dioxide emissions = [(The most recent finalized AP-42 sulfur dioxide emission factor) divided by (Heating value of the fuel oil in mmBTU/ 10^3 gal)].

When combusting #4 fuel oil:

Sulfur dioxide emissions = [(The most recent finalized AP-42 sulfur dioxide emission factor) divided by (Heating value of the fuel oil in $mmBTU/10^3$ gal)].

When combusting waste oil:

Sulfur dioxide emissions = [(The most recent finalized AP-42 sulfur dioxide emission factor) divided by (Heating value of the waste oil in mmBTU $/10^3$ gal)].

Permit Number: <u>V-03-032</u> **Page:** <u>28</u> **of** <u>42</u>

3. <u>Testing Requirements:</u>

a If fuel or waste oil is combusted, the permittee shall determine the opacity of emissions from the stack using U.S. EPA Reference Method 9 annually, or more frequently if requested by the Division.

b. The permittee shall conduct a performance test for particulate emissions when combusting fuel or waste oil if such usage exceeds 60 days within any consecutive twelve months period.

4. **Specific Monitoring Requirements:**

- a. The permittee shall monitor fuel usage on a monthly basis.
- b. The permittee shall monitor the heating value and sulfur content of each type of fuel and waste oil combusted. The permittee may use the certification from the fuel supplier to satisfy this requirement. The fuel supplier certification shall include the name of the oil supplier and a statement from the oil supplier that the oil complies with the specifications under the definition of fuel oil specified in the regulation.

5. Specific Record Keeping Requirements:

- a. The permittee shall maintain records of the amount of each type of fuel combusted in each unit on a monthly basis.
- b. The permittee shall maintain records of the heating value and sulfur content for each type of fuel and waste oil.
- c. For the purposes of precluding applicability of PSD and to satisfy Section D.3.a, a twelvemonth rolling sum of particulate emissions (TMPE) shall be kept for use in tracking particulate emissions due to combustion, e.g.,

$$TMPE = S \quad PM_{mNG}^{12} + S \quad PM_{m2F}^{12} + S \quad PM_{m4F}^{12} + S \quad PM_{mNWO}^{12}$$

Where TMPE = Summation of particulate emissions for the current month and previous 11 months for this emission point in Tons

m = the month, e.g.,

m=1=current month,

m=2=previous month,

m=3=month before previous month, etc.

 PM_{mNG} = particulate matter emitted for the month due to natural gas use PM_{m2F} = particulate matter emitted for the month due to #2 fuel oil use PM_{m4F} = particulate matter emitted for the month due to #4 fuel oil use PM_{mWO} = particulate matter emitted for the month due to waste oil use

d. For the purposes of precluding applicability of PSD and to satisfy Section D.3.b, a twelvemonth rolling sum of sulfur dioxide emissions (TMSE) shall be kept for these units for use in tracking particulate emissions due to combustion, i.e.

$$TMSE = S \quad \mathop{SO_{mNG}}_{m=1}^{12} + S \quad \mathop{SO_{m2F}}_{m=1}^{12} + S \quad \mathop{SO_{m4F}}_{m=1}^{12} + S \quad \mathop{SO_{mWO}}_{m=1}^{12}$$

Where TMSE_{unit14} = Summation of sulfur dioxide emissions for the current month and previous 11 months for this emission point in Tons

m = the month, i.e.

m=1=current month,

m=2=previous month,

m=3=month before previous month, etc.

SO_{2mNG}= sulfur dioxide emitted for the month due to natural gas use

 SO_{2m2F} = sulfur dioxide emitted for the month due to #2 fuel oil use

 SO_{2m4F} = sulfur dioxide emitted for the month due to #4 fuel oil use

SO_{2mWO}= sulfur dioxide emitted for the month due to waste oil use

e. For the purposes of precluding applicability of PSD and to satisfy Section D.3.c, a twelvemonth rolling sum of nitrogen oxide emissions (TMNE) shall be kept for these units for use in tracking NOx due to combustion, i.e.

$$TMNE = S \quad NOx_{m>1} \\ NOx_{m=1} \\ NOx_{m=1} \\ + S \quad NOx_{m=1} \\$$

Where TMNE = Summation of NOx emissions for the current month and previous 11 months for this emission point in Tons

m =the month, i.e.

m=1=current month,

m=2=previous month,

m=3=month before previous month, etc.

NOx_{mNG}= NOx emitted for the month due to natural gas use

 $NOx_{m2F} = NOx$ emitted for the month due to #2 fuel oil use

 NOx_{m4F} = NOx emitted for the month due to #4 fuel oil use

 NOx_{mWO} = NOx emitted for the month due to waste oil use

Permit Number: $\underline{V-03-032}$ Page: $\underline{30}$ of $\underline{42}$

6. **Specific Reporting Requirements:**

See Section F.

7. <u>Specific Control Equipment Operating Conditions:</u>

None

8. Alternate Operating Scenarios:

None

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the

Permit Number: <u>V-03-032</u> **Page:** <u>31</u> **of** <u>42</u>

permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

Des	cription		Generally Applicable Regulation
1. 2. 3.	01-003 01-004 01-007	Grain Cleaner Receiver Cyclone Grain Bin Loading Meal Bin Loading	401 KAR 61:020 401 KAR 59:010 401 KAR 61:020
4. 5.	02-002 02-003	Beer Well Vent Condenser	NA NA
<i>6</i> .	02-004	Vent Condenser Vent Scrubber Condenser	NA
7.	02-006	Column Condenser	NA
8.	02-007	Spirits Tanks	NA
9.	02-008	Heads and Tails Tanks	NA
10.	02-009	Receiving Cistern Tanks	NA
11.	02-010	Beer Still Pressure Relief	NA
12.	02-011	Doubler Still Pressure Relief	NA
13.	02-012	Column Still Pressure Relief	NA
14.	03-004	Distiller's Dried Grain Conveying	401 KAR 61:020
15.	07-002	C-Fill Line	NA
16.	07-004	F-Fill Line	NA
17.	07-005	Blanton Fill Line	NA
18.	07-005a	G-Fill Line	NA
19.	07-005b	H-Fill Line	NA
20.	07-005d	K-Fill Line	NA
21.	07-006	Labeling/Case Sealing	NA
22.	07-007	Case Printing	NA
23.	09-004	Coal Stockpile	401 KAR 63:010
24.	09-005	Total Coal Loading	401 KAR 61:020
25.	09-006	Total Coal Bucket Elevators	401 KAR 59:010
26.	09-007	Coal Bunker Filling	401 KAR 61:020
27.	09-008	Ash Handling	401 KAR 61:020
28.	09-009	Ash Loadout	401 KAR 63:010
29.	09-010	Blended Waste Oil Tank	NA
30.	09-011	Caustic Tanks-NaOH	NA
31.	11-001	Unpaved Roads	401 KAR 63:010
32.		Mobile Sources	401 KAR 63:010
33.		Maintenance Equipment	NA
34.		Evaporative Chiller	401 KAR 63:010
35.		Three (3) 10,000 gallons Grain Cook	ters 401 KAR 63:010

Permit Number: $\underline{V-03-032}$ Page: $\underline{32}$ of $\underline{42}$

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

- 1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
- 2. Particulate matter, sulfur dioxide, and visible emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.
- 3. In order to preclude the applicability of 401 KAR 51:017, the permittee shall not exceed the following limitations:
 - a. The total source-wide particulate matter emissions shall not exceed 245 tons in any consecutive twelve-month period.
 - b. The total source-wide sulfur dioxide emissions shall not exceed 245 tons in any consecutive twelve-month period.
 - c. The total source-wide nitrogen oxide emissions shall not exceed 245 tons in any consecutive twelve-month period.

Permit Number: <u>V-03-032</u> **Page:** <u>33</u> of <u>42</u>

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

Permit Number: <u>V-03-032</u> **Page:** <u>34</u> **of** <u>42</u>

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:

- a. Date, place as defined in this permit, and time of sampling or measurements;
- b. Analyses performance dates;
- c. Company or entity that performed analyses;
- d. Analytical techniques or methods used;
- e. Analyses results; and
- f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit:
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

Permit Number: <u>V-03-032</u> **Page:** <u>35</u> **of** <u>42</u>

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- 6. The semi-annual reports are due by January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].
- 9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

Permit Number: <u>V-03-032</u> **Page:** <u>36</u> **of** <u>42</u>

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality Frankfort Regional Office 643 Teton Trail, Suite B Frankfort, KY 40601-1758 U.S. EPA Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth St. Atlanta, GA 30303-8960

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601

- 10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
- 11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

Permit Number: <u>V-03-032</u> **Page:** <u>37</u> **of** <u>42</u>

SECTION G - GENERAL PROVISIONS

(a) <u>General Compliance Requirements</u>

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

- 2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- 4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

Permit Number: <u>V-03-032</u> **Page:** <u>38</u> **of** <u>42</u>

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

- 7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
- 11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
- 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
- 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
- 15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

Permit Number: <u>V-03-032</u> **Page:** <u>39</u> **of** <u>42</u>

SECTION G - GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:

- a. Applicable requirements that are included and specifically identified in the permit and
- b. Non-applicable requirements expressly identified in this permit.

(b) Permit Expiration and Reapplication Requirements

- 1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- 2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:02, Section 8(2)].

(c) Permit Revisions

- 1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- 2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

(d) Emergency Provisions

- 1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;

Permit Number: $\underline{V-03-032}$ Page: $\underline{40}$ of $\underline{42}$

- b. The permitted facility was at the time being properly operated;
- During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
- d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- e. This requirement does not relieve the source of other local, state or federal notification requirements.
- 2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- 3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].
- (e) Risk Management Provisions
- 1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 3346 Merrifield, VA, 22116-3346

- 2. If requested, submit additional relevant information to the Division or the U.S. EPA.
- (f) Ozone depleting substances
- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as

SECTION G - GENERAL PROVISIONS (CONTINUED)

Permit Number: <u>V-03-032</u> **Page:** <u>41</u> **of** <u>42</u>

- defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
- e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

Permit Number: <u>V-03-032</u> **Page:** <u>42</u> **of** <u>42</u>

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE